

Table S3. Summary of  $\Delta^{14}\text{CO}_2$  records used in the compilation for different time periods. IntCal13 and SHCal13 refer to the compilations of Reimer et al. (2013) and Hogg et al. (2013). Stations listed without a reference refer to measurements from the Heidelberg University network (Levin et al. 2010). Additional references are given in the text.

Period	SH	Period	Tropics	Period	NH
1850-1939	SHCal13	1850-1939	Average of SHCal13 and IntCal13	1850-1939	IntCal13
1940-1950	IntCal13	1940-1950	IntCal13	1940-1950	IntCal13
1951-54	Stuiver and Quay (1981)	1951-54	Stuiver and Quay (1981)	1951-54	Stuiver and Quay (1981)
1955-1983	Wellington (Manning and Melhuish 1994), adjusted by -4 ‰	1955-1984	Average of NH and SH, adjusted by box model from Naegler and Levin (2006)	1955-58	Tropospheric data compiled by Tans (1981)
				1959-1984	Vermunt
1984-1992, 2000-02, 2004-06, 2010 and 2012-14	Average of Neumayer and Cape Grim, adjusted by -1.2 ‰	1985-90	NH, adjusted by +2.9 ‰	1985-88	Izaña, adjusted by -0.9 ‰
1993-99, 2003, 2007-09 and 2011	Average of Neumayer, Cape Grim and Macquarie Island	1991-97	Mérida	1989-1997	Average of Izaña, Jungfraujoch, and Alert
		1998-2015	NH, adjusted by +2.9 ‰	1997-2010	Average of Jungfraujoch, Alert and Mace Head
2015	Neumayer, adjusted by -2 ‰				2011-15